

Observation de la poussière



AERONET
AEROSOL ROBOTIC NETWORK



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AEROSOL ROBOTIC NETWORK

Tamanrasset_INM , N 22°47'24" , E 05°31'48" , Alt 1377 m,
 PI : Emilio_Cuevas-Agullo, ecuevas@gaenet.es
 SDA ADD from Level 1.5 ADD: MAR 2012



```

MAR      2012  PERNET Version 2 DS, SDA Version 4.1
Tamanrasset_INM , N 22°47'24", E 05°31'48", ALT 1377 m,
PI : Emilio.Cuevas-Agullo, ecuevas@aenat.es
Size Distribution Alcantar Level 1.5; 24 MAR 2012

```



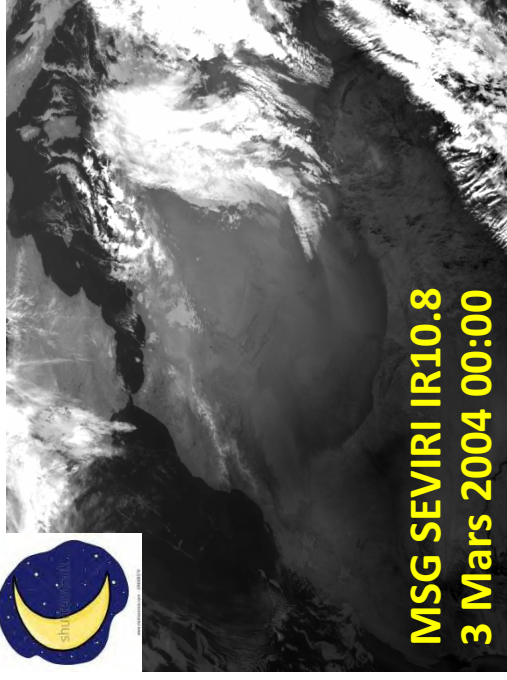
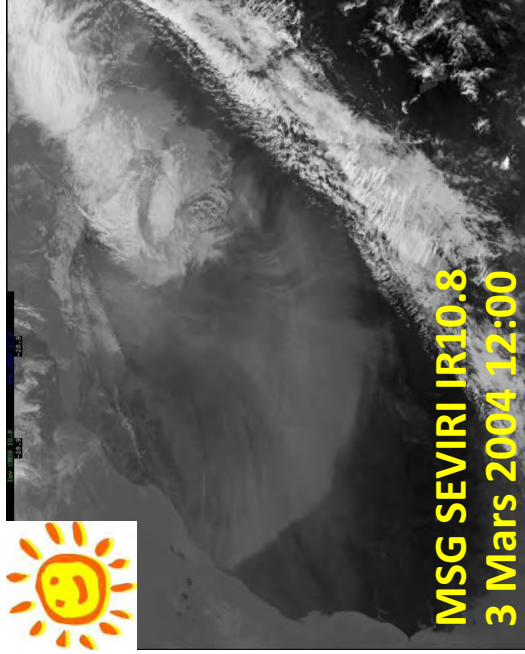
RT	0.1	1	10	100
Radius (r) [um]				
Version 2				

PI: E. Cuevas



Observation de la poussière

Images satellitaires infrarouges

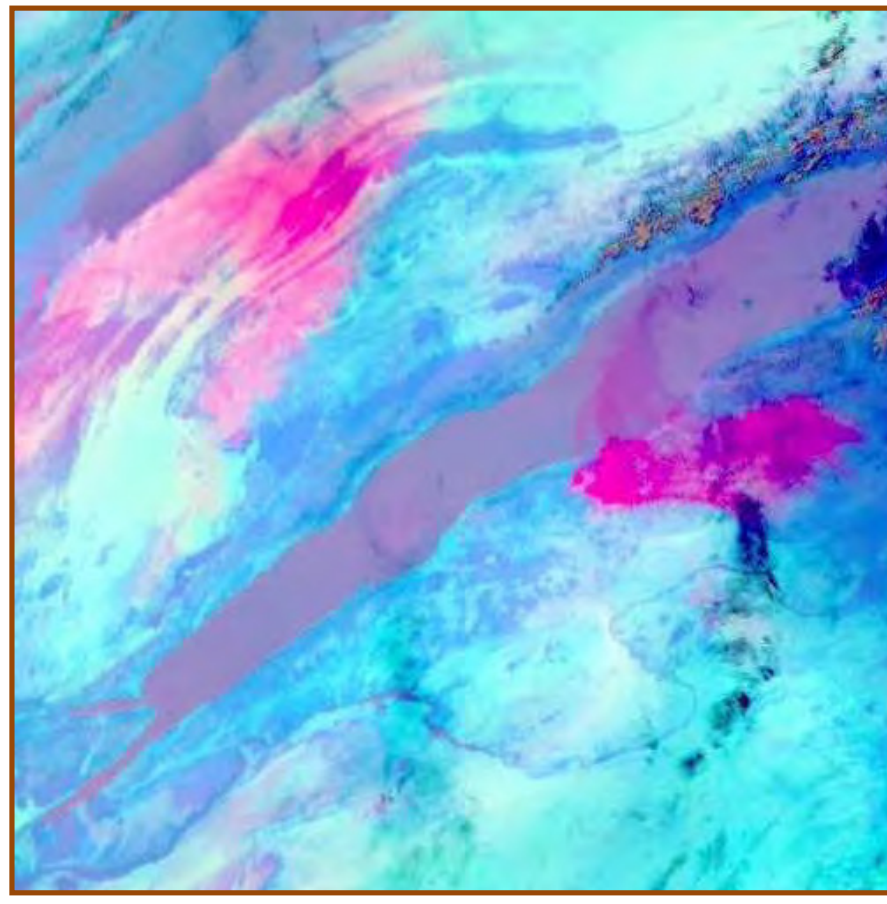
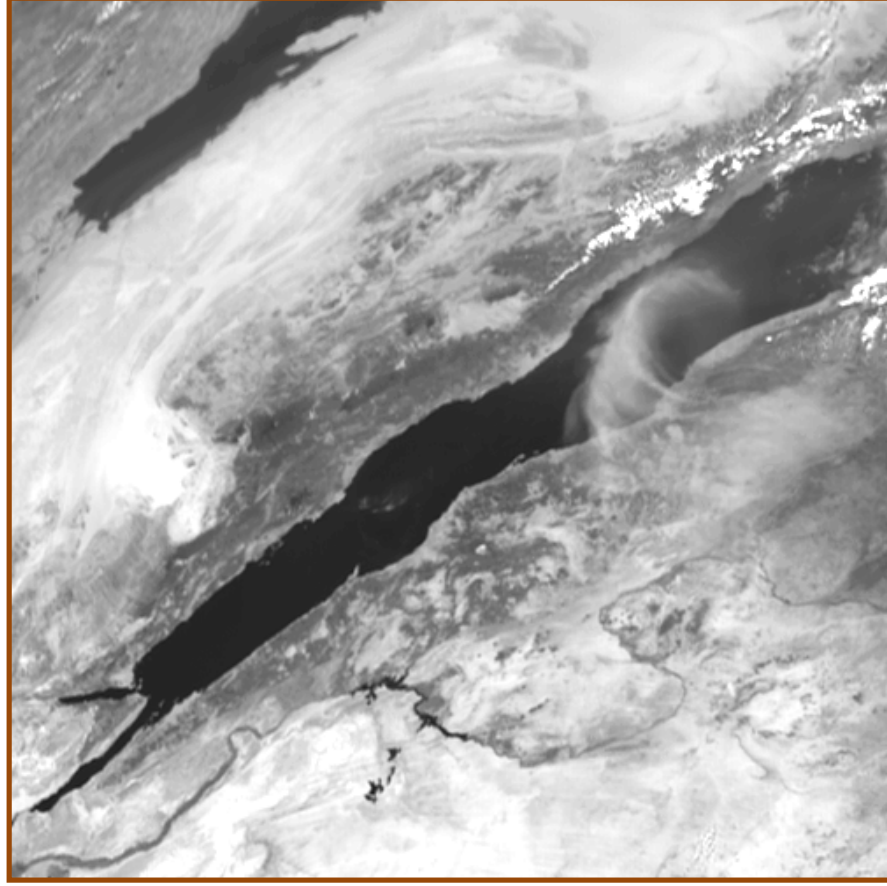


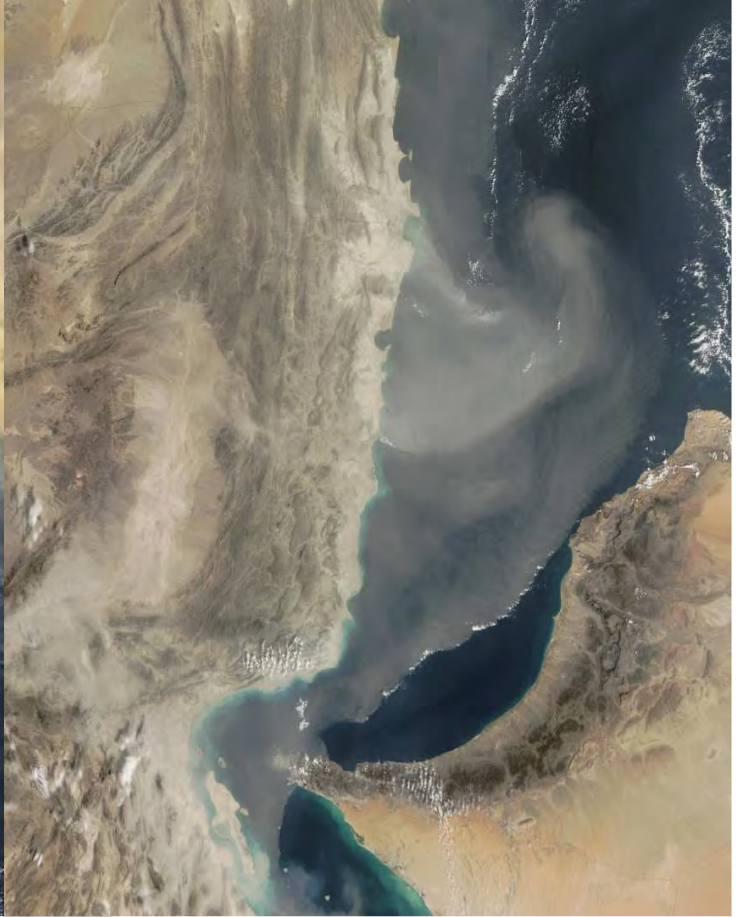
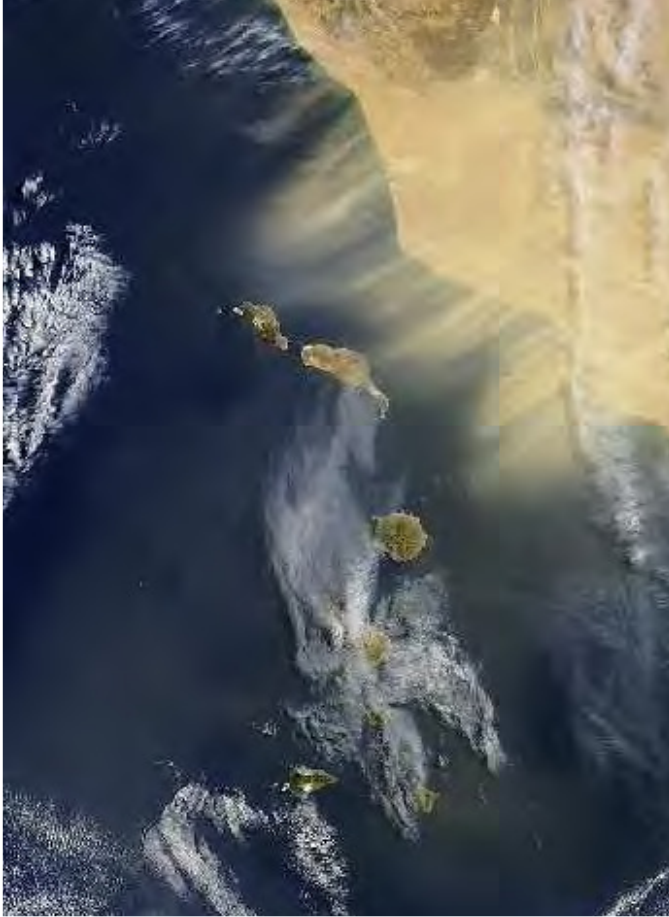
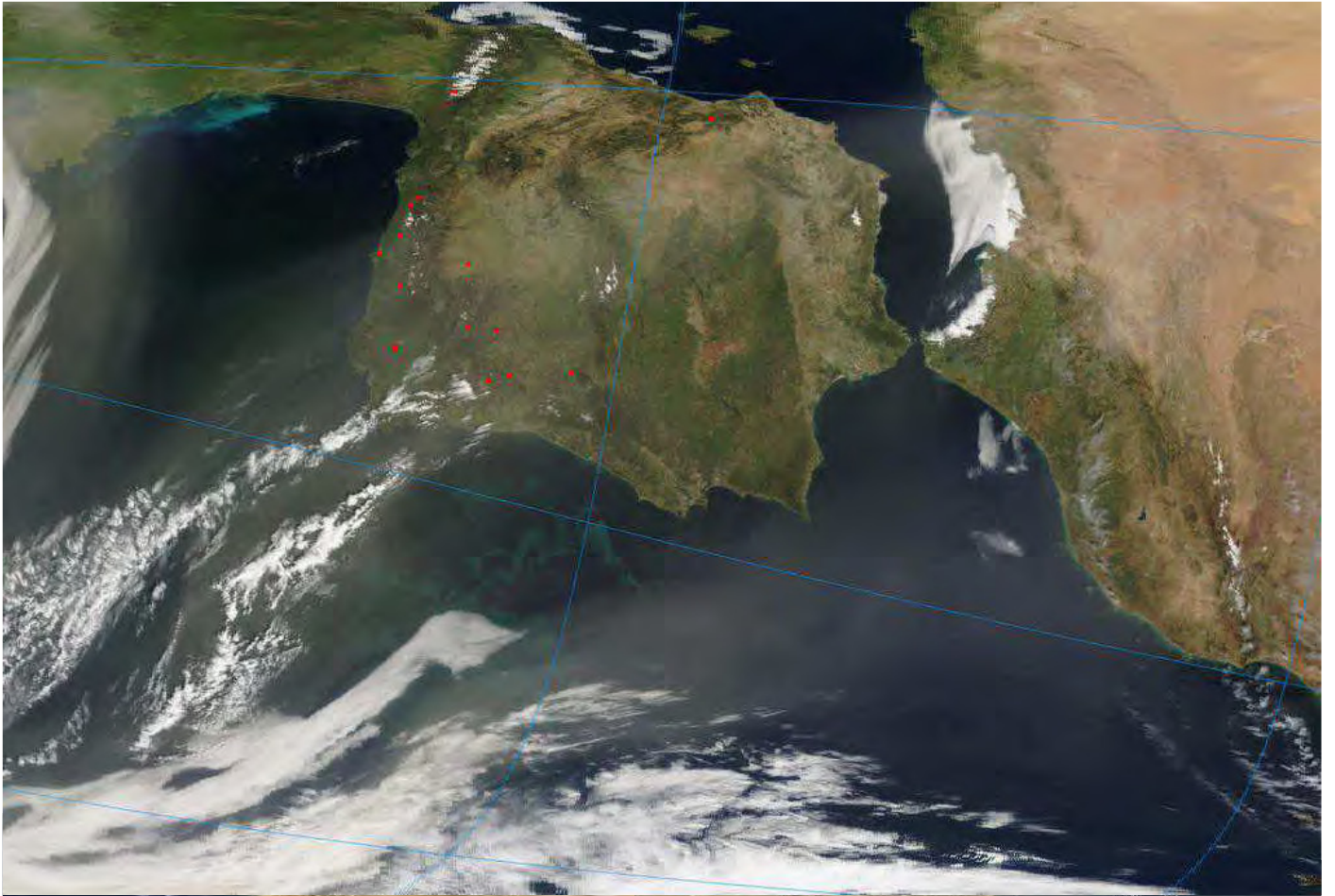
Observation de la poussière

Images satellitaires visibles

Met-8 Vis 25 Juin 2003 10:00

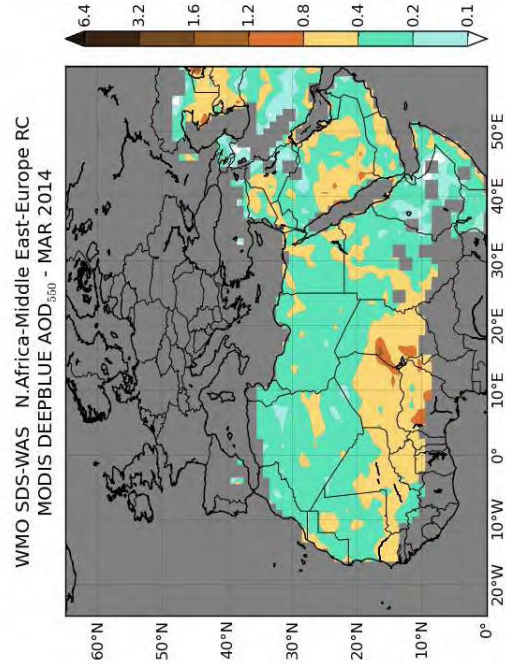
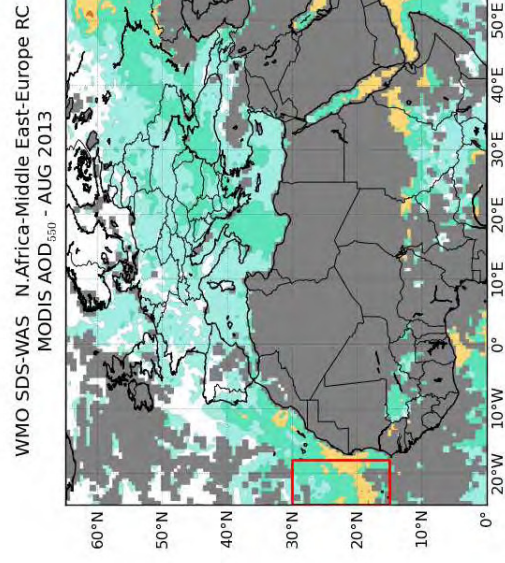
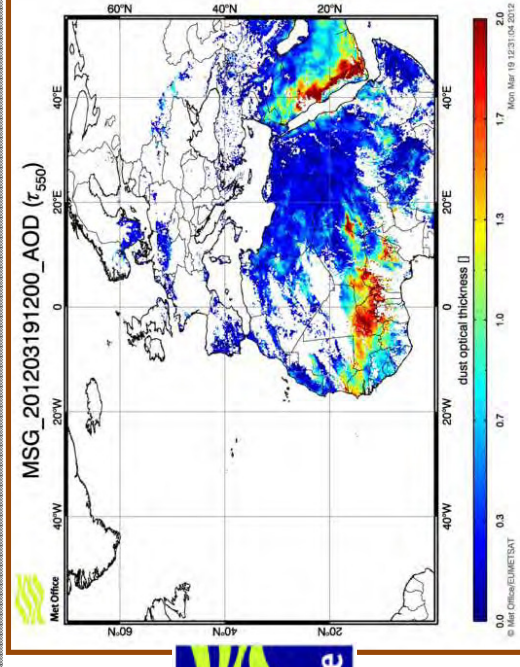
EUM RGB-Dust 25 Juin 2003 10:00





Observation de la poussière

Valeurs quantitatives à partir d'images satellitaires: POA



Prédiction de la poussière

- Le cycle de la poussière et ses impacts
- Observation de la poussière
- **Prédiction de la poussière**
- SDS-WAS (R&D) et BDFC (opérations)

OMM. SDS-WAS

Centre Régional pour l'Afrique du
Nord, Moyen Orient et Europe

<http://sds-was.aemet.es>
sdswas@aemet.es

Barcelona Dust Forecast Center

<http://dust.aemet.es>
dust@aemet.es



**World
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Weather • Climate • Water

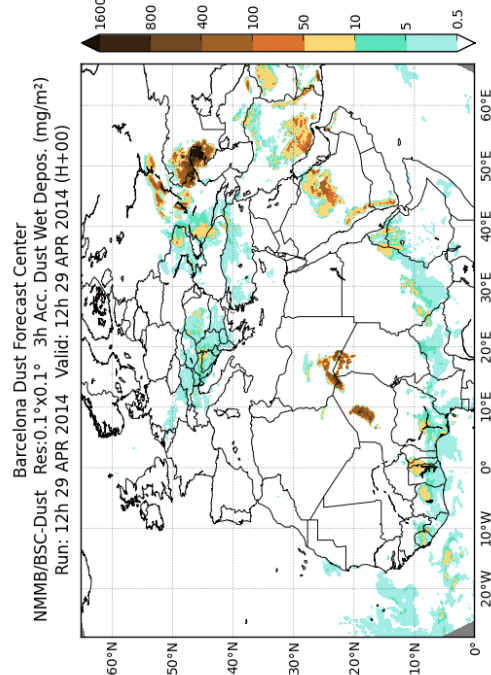
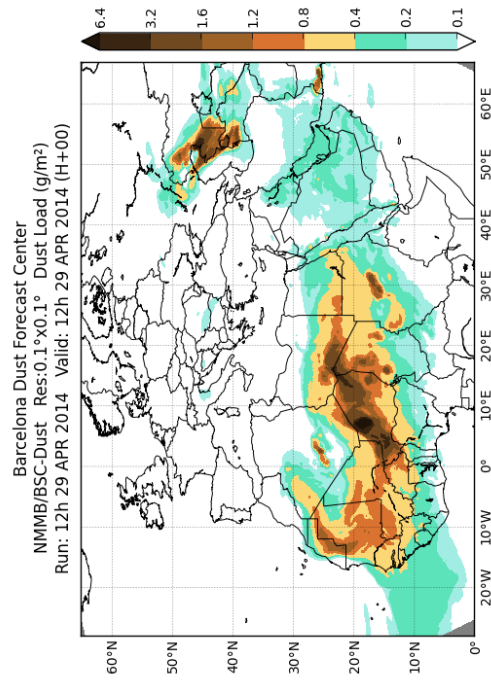
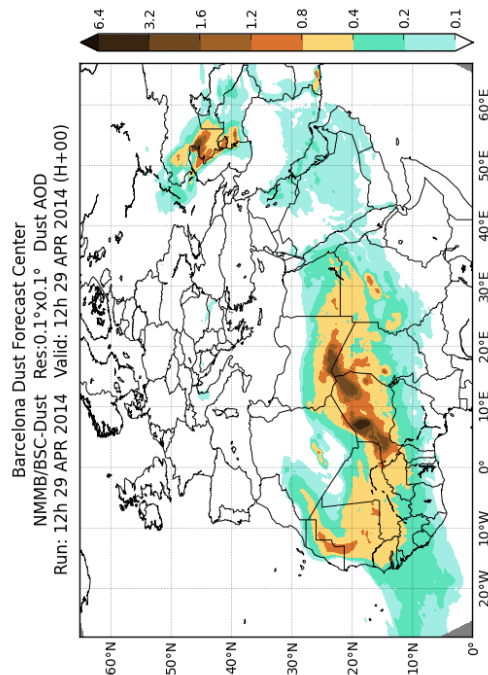
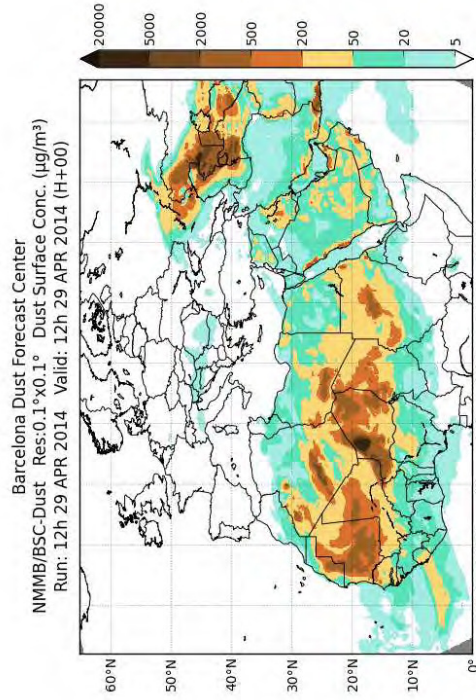


**Barcelona
Supercomputing
Center**

Centro Nacional de Supercomputación

Prédiction de la poussière

Les produits



Prédiction de la poussière

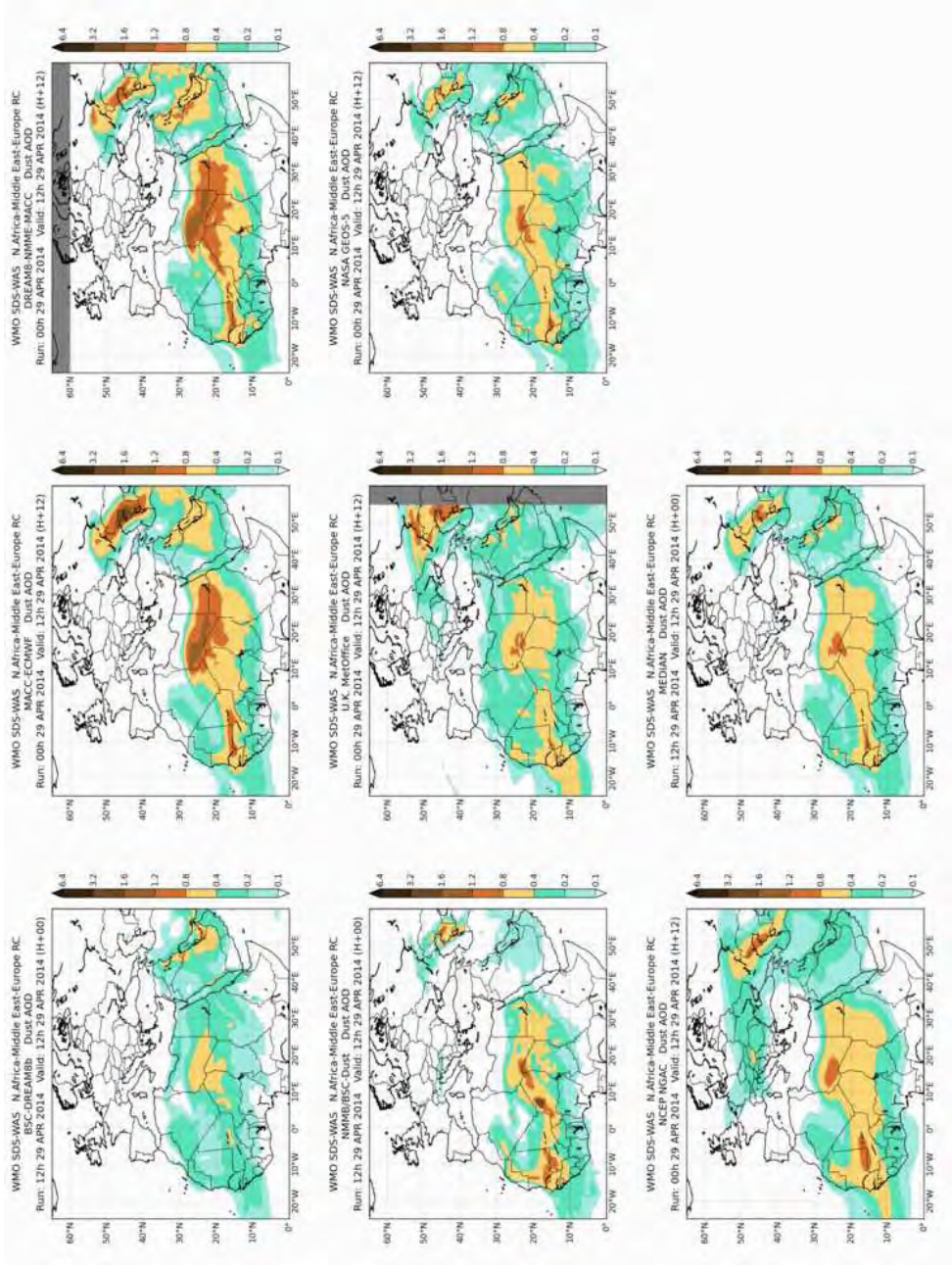
Les produits



MODEL	INSTITUTION	RUN TIME	DOMAIN	DATA ASSIMILATION
BSC-DREAM8b	BSC-CNS	12	Regional	No
MACC	ECMWF	00	Global	MODIS AOD
DREAM-NMME-MACC	SEEVCCC	12	Regional	MACC analysis
NMMB/BSC-Dust	BSC-CNS	12	Regional	No
MetUM	U. K. Met Office	00	Global	MODIS AOD
GEOS-5	NASA	00	Global	MODIS reflectances
NGAC	NCEP	00	Global	No

Prédiction de la poussière

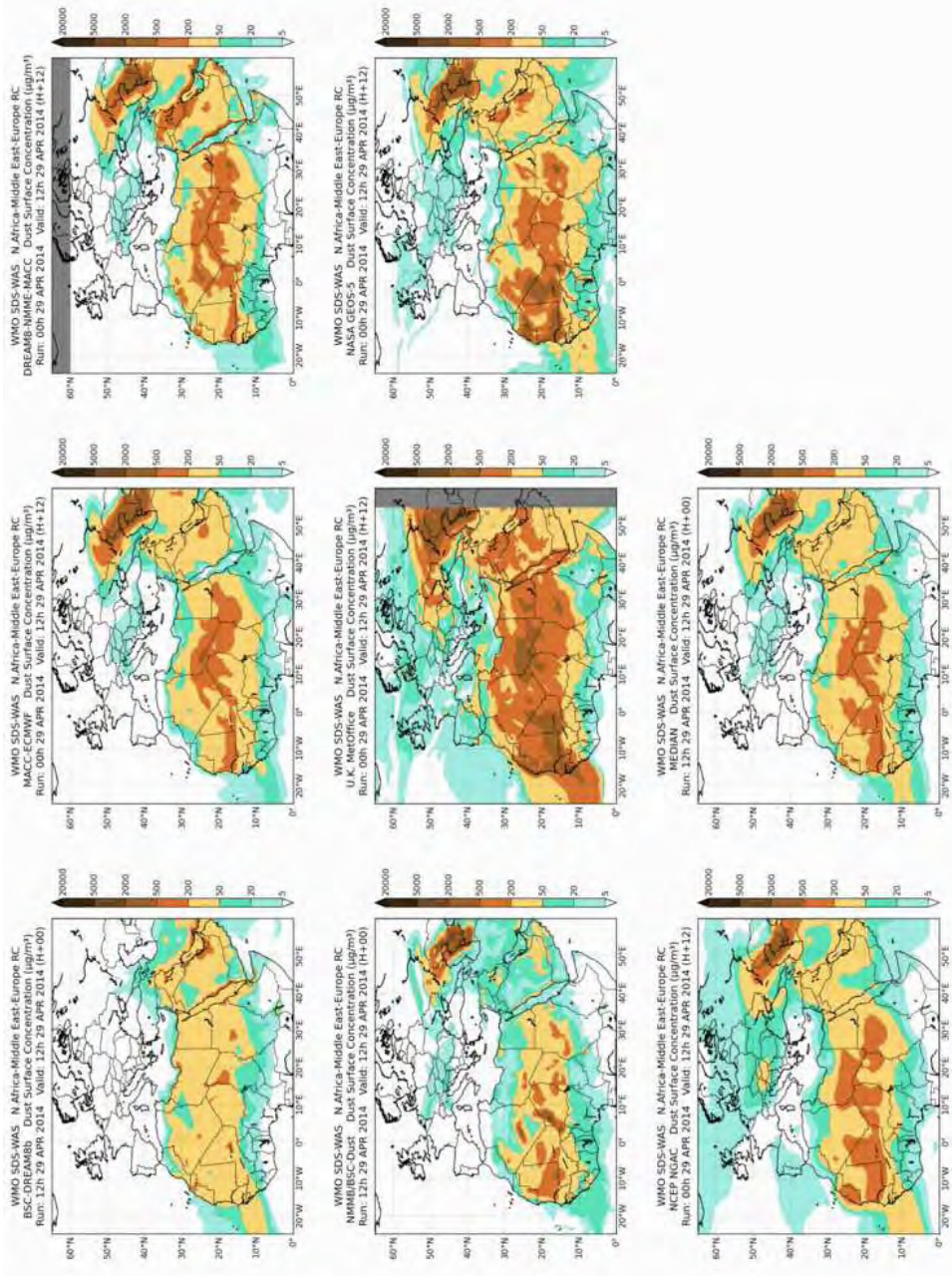
PO de poussière à 550 nm



EXÉCUTION: 29 Avril 2014 VALIDE: 29 Avril 2014 12:00 – 2 Mai 2012 00:00

Prédiction de la poussière

Concentration de poussière a la surface



EXÉCUTION: 29 Avril 2014 VALIDE: 29 Avril 2014 12:00 – 2 Mai 2012 00:00

Prédiction de la poussière

Download des produits numériques

NORTHERN AFRICA-MIDDLE EAST-EUROPE (NA-ME-E) REGIONAL CENTER
WMO Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS)

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forecast & Products > Dust forecasts
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Mar 20, 2013 12:43 PM — History

recasts
Dust prediction models are represented for a common geographical domain using a

Concentration SFC
PO poussière 550 nm

Format netCDF



Title	Size	Modified
latest - (download all)	4.0 kB	Apr 18, 2013 09:00 PM
2013 - (download all)	4.0 kB	Apr 01, 2013 09:00 PM
2012 - (download all)	4.0 kB	Apr 08, 2013 04:30 PM

BSC-DREAM6b v2.0	DOWNLOAD FILES	Model website	
MACC-ECMWF	DOWNLOAD FILES	Model website	
DREAM-NMME-MACC	DOWNLOAD FILES	Model website	
NMMB/BSC-Dust	DOWNLOAD FILES	Model website	
NASA-GEOS-5	DOWNLOAD FILES	Model website	
NCEP-NGAC	DOWNLOAD FILES	Model website	
Multimodel MEDIAN	DOWNLOAD FILES	Model website	

Prédiction de la poussière

Évaluation avec des données AERONET



Model evaluation metrics. Seasonal scores

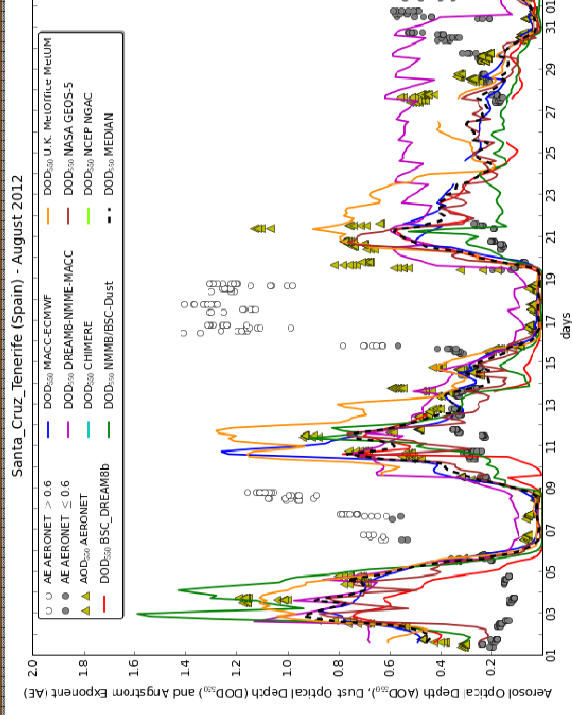
by Francisco Bellocq — last modified Mar 25, 2013 05:25 PM — History

Date: - Select Year - - Select Season -

Dec 2012 - Feb 2013, Dust Optical Depth.
Threshold Angstrom Exponent = 0.600

BIA S

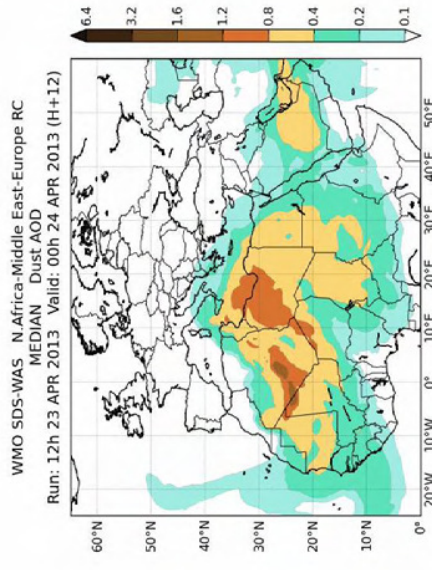
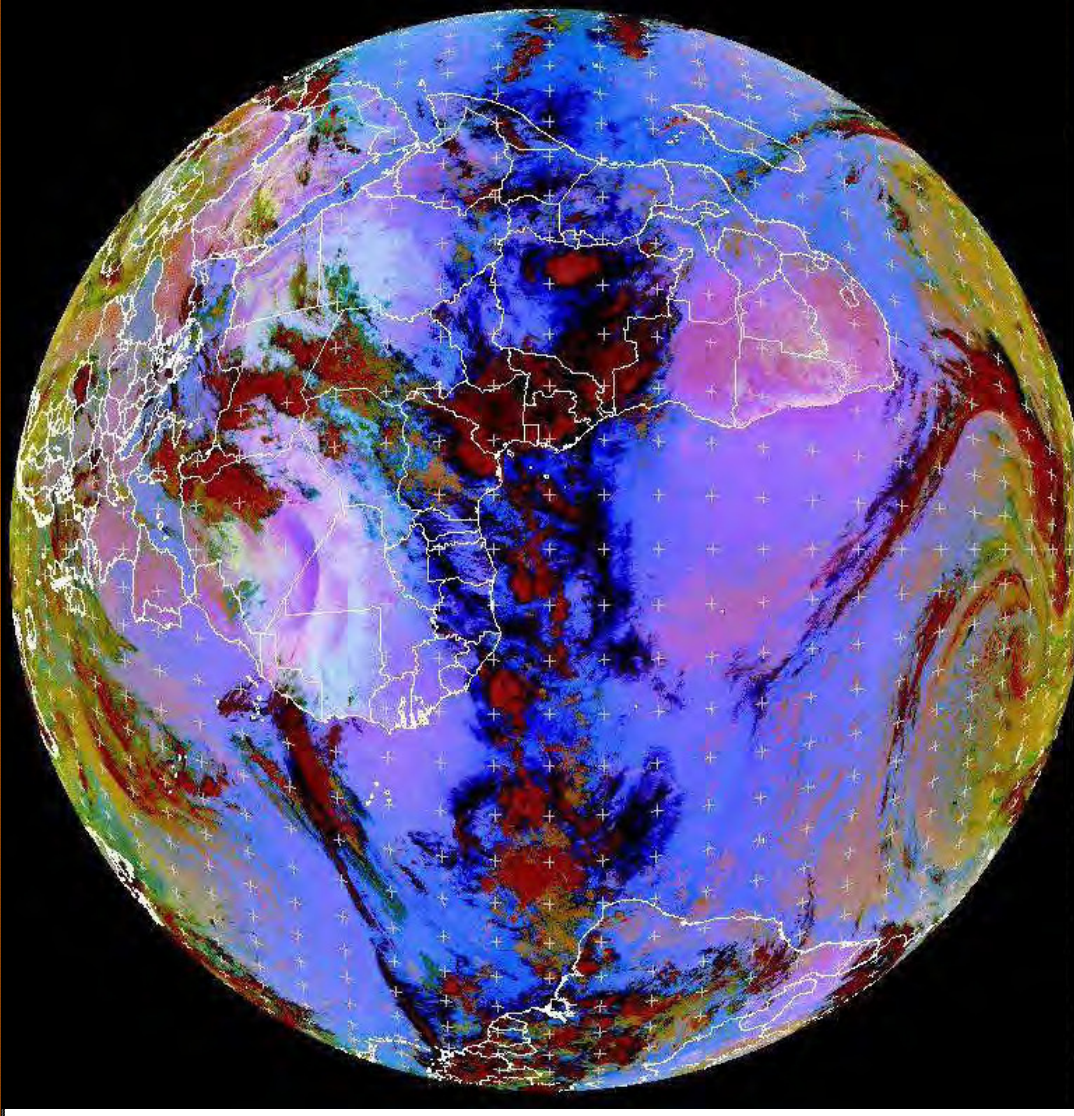
	BSC_	MACC- ECHWF	DREAMB- NMME- MACC	NMMB/ BSC- Dust	U.K. Met Office	NASA GEOS-5	NCEP NGAC	MEDIAN
Sahel/Sahara show stations	-0.18	-0.14	-0.14	-0.09	0.00	-0.08	-0.03	-0.11
Middle East show stations	-0.12	-0.13	-0.04	-0.22	-0.00	-0.15	-0.14	-0.13
Mediterranean show stations	-0.13	-0.14	-0.12	-0.15	-0.09	-0.14	-0.11	-0.13
TOTAL	-0.16	-0.14	-0.13	-0.12	-0.03	-0.11	-0.07	-0.12



SANTA_CRUZ_TENERIFE

Prédiction de la poussière

Evaluation avec des produits satellitaires



24 avril 2013